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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,439	04/03/2006	Hugo De Vries	5100-0000022/US	6814
30593	7590	08/20/2008		
HARNESS, DICKY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER	
			JUSKA, CHERYL ANN	
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
08/20/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,439	<b>Applicant(s)</b> DE VRIES, HUGO
	<b>Examiner</b> Cheryl Juska	<b>Art Unit</b> 1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 20 June 2005.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 June 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/02505)  
 Paper No(s)/Mail Date 06/20/05
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Specification***

1. The specification is objected to for the lack of section headings as suggested by 37 CFR 1.77(b).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-13, 15, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,601,886 issued to Ishikawa et al. in view of US 6,338,885 issued to Prevost.

Ishikawa discloses an artificial turf comprising pile tufts of grass filaments and tufts of assist filaments, wherein the assist tufts are shorter in height than the grass tufts (abstract). The assist tufts are implanted between the rows of grass tufts, thus forming alternate rows of grass tufts and assist tufts (abstract and col. 1, lines 62-65). The grass and assist tufts may be formed of synthetic fiber monofilaments, while the assist tufts may alternately be formed of natural fibers, such as jute or hemp (col. 4, lines 33-49). The assist tufts are preferably loop-shaped pile tufts (col. 2, lines 9-12). The grass tufts may have a denier of 300-1500 per filament and 3000-12,000 per tuft, while the assist tufts may have a denier of 30-300 per filament and 1500-12,000 per tuft (col. 2, lines 25-

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40). Additionally, the turf may include an infill material at a thickness less than the height of the grass tufts (abstract and Figure 3).

Thus, claims 1, 2, 4-13, 15, and 18-24 are taught by the cited Ishikawa reference with the exception of the distance between rows (i.e., tuft gauge) and between pile blades (i.e., stitch density). However, these variables would have been readily obvious to a skilled artisan. Specifically, it would have been obvious to one skilled in the art to employ a tuft gauge and stitch density in the range recited by applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Note the ranges claimed by applicant are known in the prior art. For example, Prevost teaches a preferred row spacing of 5/8 - 2 1/4 inch (about 16-57 mm), which is relatively wide compared to other known prior art, and 2-8 tufts per inch stitch density (i.e., 2 tufts per inch produces about 13 mm spacing between stitches) (col. 2, line 58-col. 3, line 10, col. 4, lines 11-16, and col. 6, lines 7-8 and 55-62). Hence, all the claimed elements were known in the prior art and a skilled artisan could have combined them with predictable results. Therefore, applicant's claims 1, 2, 4-13, 15, and 18-24 are rejected as being obvious over the prior art.

Regarding claims 16 and 17, the artificial turf of Ishikawa is made with a tufting machine having a needle bar consisting of two types of tufting needles, one of which is used for tufting grass filaments and the other for tufting assist filaments (col. 2, lines 60-63). This produces the alternating rows of grass and assist tufts spaced at a predetermined distance (i.e., tuft gauge). Furthermore, while not explicitly stated by Ishikawa, it is asserted that the fabric is inherently displaced to a distance corresponding

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to the desired stitch density between needle strokes and then held in position for the next needle stroke. Therefore, claims 16 and 17 are also rejected by the prior art.

4. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,601,886 issued to Ishikawa et al. in view of US 6,338,885 issued to Prevost as applied to claims 1 and 12 above, and in further view of US 6,955,841 issued to Weghuis et al.

While Ishikawa fails to teach the artificial turf is made by weaving the grass pile blades into a backing, woven pile fabrics are well known alternatives to tufted fabrics. For example, Weghuis discloses an artificial grass lawn comprising a base layer having first artificial grass fibers (abstract). The grass fibers are fixed to the base layer by means of weaving, knitting, or tufting methods (col. 2, lines 51-55). Thus, it would have been readily obvious to substitute a woven pile fabric for the tufted fabric of Ishikawa since substitution of one known method of making a pile fabric for another known method of making a pile fabric would have yielded predictable results to one of ordinary skill in the art. Therefore, claims 3 and 14 are also rejected over the prior art.

### *Conclusion*

5. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye

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can be reached at 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Cheryl Juska/*  
Primary Examiner  
Art Unit 1794

cj  
August 23, 2008